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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,596	12/28/2001	Peter Van Buskirk	441	8197

25559 7590 06/15/2004

ATMI, INC.
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EXAMINER

OWENS, DOUGLAS W

ART UNIT PAPER NUMBER

2811

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

APX

Advisory Action	Application No. 10/034,596	Applicant(s) BUSKIRK, PETER VAN	
	Examiner Douglas W Owens	Art Unit 2811	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 27 May 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. ☒ Applicant's reply has overcome the following rejection(s): The 35 USC 112, second paragraph rejection to claim 2.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

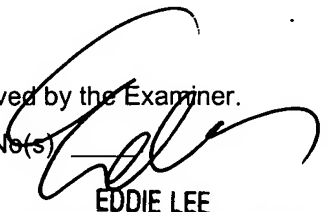
Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-10.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
10. ☐ Other: _____


EDDIE LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Continuation of 5. does NOT place the application in condition for allowance because: Applicant argues that the specification provides a standard for ascertaining the requisite degree of the term "substantial magnetic permeability" and "substantial dielectric permittivity". It is agreed that the specification provides a standard for "high magnetic permeability" and "high dielectric permittivity". However, the claims do not recite the terms "high magnetic permeability" and "high dielectric permittivity". The claims recite the language "substantial". Lacking a standard for ascertaining the degree intended by the term "substantial", it is impossible to determine the scope of what is being claimed.

Applicant argues that Ma does not disclose an enhancement layer having high dielectric permittivity or substantial dielectric permittivity. Initially, Applicant does not recite an enhancement layer having high dielectric permittivity in the claims. Further, despite the alleged errors in the Final Rejection, Ma teaches an enhancement layer (60) comprising silicon nitride, which is known to have a dielectric constant in the range of 6-8, depending on the stoichiometry. Moreover, the term substantial is defined in Merriam-Webster's Collegiate Dictionary as, consisting of or relating to substance, also, not imaginary or illusory. Silicon nitride meets this limitation. The term "substantial" can also be taken as a relative term, wherein a commonly used dielectric material is used as a basis of comparison, such as silicon dioxide. The dielectric constant of silicon nitride is indeed substantial, although in light of the specification it would not be considered high. However, as stated above, an enhancement layer having a high dielectric constant is not claimed.